

**15 RESEARCH PROJECT, REPORT WRITING, EXPERT
TESTIMONY AND EXTERNAL LABORATORY REVIEW AND
TOURS**

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Division of Forensic Science
FIREARM/TOOLMARK TRAINING MANUAL

Amendment Designator:

Effective Date: 13 May 2003

15 RESEARCH PROJECT, REPORT WRITING, EXPERT TESTIMONY AND EXTERNAL LABORATORY REVIEW AND TOURS

15.1 Method

- 15.1.1 Formulate a method of taking notes in cases, that is, how to note essential data on which you base your conclusions, to document chain of custody, to identify a case with a particular contributor and with a particular file. Develop a system for the administration of these cases. Discuss the above areas with the Training Officer.

Training Officer

Date _____

- 15.1.2 Read through copies of reports generated by at least two examiners for the purpose of familiarization with report format and phraseology. Compile a reference file which reflects correct phraseology divided into appropriate categories, i.e., bullet examination, bullet "*no conclusion*," bullet identification, cartridge case identification, firearms function, accidental discharge, gunshot residues, etc. Discuss this with the Training Officer.

Training Officer

Date _____

- 15.1.3 Attend moot courts of other trainees and evaluate the demeanor and professionalism of the trainee. Discuss this with the Training Officer.

Training Officer

Date _____

- 15.1.4 Review several transcripts of at least two examiners regarding their "*expert*" testimony in the field of firearms/toolmark identification. Discuss these transcripts with each examiner.

Examiner

Date _____

Examiner

Date _____

Training Officer

Date _____

- 15.1.5 Discuss the meaning and/or definition of the following terms or phrases, as they apply to testimony in the field of firearms/toolmark identification, with the Training Officer.

- Expert witness
- Reasonable degree of scientific certainty
- Hearsay

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- Opinion
- Voir dire

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15.1.6 Prepare a list of "*qualification questions*" which can be used by the prosecutor in court to qualify you as an expert witness. Include in this questions which can be used as a guide for the introduction in court of the evidence which has previously been examined. Discuss this with the Training Officer.

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15.1.7 Observe at least two examiners testifying as an "*expert witness*." Discuss their testimonies with each examiner. Coordinate this with the Training Officer.

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15.1.8 Confer with other examiners regarding personal hints and recommendations in regard to courtroom testimony. This discussion should be lengthy and cover all aspects of the topic.

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15.2 Reference Materials Research Project

The following reference materials serve several purposes:

- To provide a wider range of additional resources in a given topic
- To provide reference materials for future use
- To gain additional in depth knowledge in a particular subject area

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<p>Other references encountered in this category should be made as notes at the end of this listing.</p> <p>15.2.1 Research Techniques</p> <p>Bennis, W., <u>On Becoming a Leader</u>, Addison-Wesley, Reading, MA, 1989.</p> <p>Carr, J.J., <u>The Art of Science: A Practical Guide to Experiments, Observations, and Handling Data</u>, High Text Publications, San Diego, CA, 1992.</p> <p>Copi, I.M., <u>Introduction to Logic</u>, 7th edition, MacMillan, NY, 1986.</p> <p>Halpern, D.F., <u>Thought and Knowledge: An Introduction to Critical Thinking</u>, 2nd edition, Lawrence Erlbaum Associates, Hillsdale, NJ, 1989.</p> <p>Herceg, E.E., <u>Handbook of Measurement and Control</u>, Shawitz Engineering, Pennsauken, NJ, 1972.</p> <p>Jaffe, A.J., and Spirer, H.F., <u>Misused Statistics: Straight Talk about Twisted Numbers</u>, Marcel Dekker, Inc., NY, 1987.</p> <p>Langley, R., <u>Practical Statistics</u>, Dover Publications, NY, 1968,1970.</p> <p>Paul, R., <u>Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World</u>, Sonoma State University, Rohnert Park CA, 1980.</p> <p>Smith, G., <u>Statistical Reasoning</u>, Allyn & Bacon, Needham Heights, MA, 1991.</p> <p>Tukey, J., and Mosteller, F., <u>Data Analysis and Regression</u>, Addison Welsey, Reading, MA, 1977.</p> <p>15.2.2 Self-Directed Learning</p> <p>Cross, P.K., <u>Adults as Learners</u>, Jossey-Bass, San Francisco, 1981.</p> <p>Drumheller, S.J., <u>Handbook of Curriculum Design for Individualized Instruction: a Systems Approach</u>, Educational Technology Publications, Englewood Cliffs, NJ 1971.</p> <p>Dunn, R., and Dunn, K., <u>Practical Approaches to Individualizing Instruction</u>, Parker Publishing Co., West Nyack, NY, 1972.</p> <p>Knowles, M.S., <u>The Modern Practice of Adult Education</u>, Follet Publishing, Chicago, 1980.</p> <p>Knowles, M.S., and Associates, <u>Andragogy in Action: Applying Modern Principles of Adult Learning</u>, Jossey-Bass, San Francisco, 1984.</p> <p>Knowles, M.S., <u>Self-Directed Learning: A Guide for Learners and Teachers</u>, Association Press, New York, 1975.</p> <p>Knowles, M.S., <u>The Adult Learner: A Neglected Species</u>, Gulf Publishing Co., Houston, TX, 1973.</p> <p>Messick, S., and Associates, <u>Individualization in Learning</u>, Jossey-Bass, San Francisco, 1976.</p>	

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<p>15.2.3 Reference Materials Oral Presentations and Court Testimony</p> <p>The following reference materials serve several purposes:</p> <ul style="list-style-type: none"> • To provide a wider range of additional resources should you have a particular interest in a given topic. • To provide reference materials for your future professional use. • To allow you to gain additional depth in particular subject areas. <p>Should you encounter other references in this category, you are encouraged to make additional notes about them at the end of this listing.</p> <p>15.2.4 General</p> <p>Andersen, G.R., "Round Pegs in Square Holes: The Aftermath of Daubert," <u>South Carolina Trial Lawyers Association Bulletin</u>, Fall, 1996, pp. 9-12.</p> <p>Babitsky, S., and Mangravati, J.J., <u>How to Excel During Cross-Examination; Techniques for Experts That Work</u>, SEAK, Inc., Falmouth, MA.</p> <p>Bailey, F.L., and Rothblatt, H.B., <u>Investigation and Preparation of Criminal Cases, Federal and State</u>, The Lawyers Co-operative Publishing Company, Rochester, NY, and the Bancroft-Whitney Company, San Francisco, CA, 1970.</p> <p><u>Crimes of Violence: Homicide and Assault</u>, The Lawyers Co-operative Publishing Company, Rochester, NY, and the Bancroft-Whitney Company, San Francisco, CA, 1973.</p> <p>Biasotti, A.A., and Murdock, J.E., "Firearms and Toolmark Identification: Legal Issues and Scientific Status," Chapter 23, <u>Modern Scientific Evidence: The Law and Science of Expert Testimony</u>, (Faigman, D.L., Kaye, D.H., Saks, M.J., and Sanders, J., eds., West Publishing Co., 1997), Vol. 2, pp. 124-151.</p> <p>Bohan, T.L., and Heels, E.J., "The Case Against Daubert: The New Scientific 'Standard' and the Standards of the Several States," <u>Journal of Forensic Sciences</u>, Vol. 40, No. 6, Nov. 1995, pp. 1030-1044.</p> <p>Bradley, M.D., <u>The Scientist and Engineer in Court</u>, American Geophysical Union, Washington, DC, 1983.</p> <p>Bronstein, D.A., <u>Law for the Expert Witness</u>, CRC Press, Boca Raton, FL, 1998.</p> <p>Burke, J.J., "Testifying in Court," <u>FBI Law Enforcement Bulletin</u>, Sep. 1975.</p> <p>Hatcher, J.S., Jury, F.J., and Weller, J., <u>Firearms Investigation, Identification and Evidence</u>, 2nd edition, Stackpole Books, Harrisburg, 1957, pp. 445-460.</p> <p>Matson, J.V., <u>Effective Expert Witnessing</u>, CRC Press, Boca Raton, FL, 1994.</p> <p>Melson, G.R., "Qualifying as An Expert in State Court: The Impact of Daubert," paper presented at the Fourth Annual Conference for Medical and Forensic Experts, Dec. 6-7, 1997, Newport Beach, CA.</p>	

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<p>Meyer, C.B., <u>Expert Witnesses □ Explaining and Understanding Science</u>, CRC Press, Boca Raton, FL, 1998.</p> <p>Moenssens, A.A., Moses, R.E., and Inbau, F.E., <u>Scientific Evidence in Criminal Cases</u>, The Foundation Press, Mineola, NY, 1973.</p> <p>Molloy, J.T., <u>New Women's Dress for Success</u>, Warner Books, 1996.</p> <p><u>John T. Molloy's New Dress for Success</u>, Warner Books, 1988.</p> <p>Moses, R.E., <u>Scientific Proof in Criminal Cases □ A Texas Lawyers Guide</u>, The Lakeland Press, 1969.</p> <p>Neal, M.W., "From the Hot Seat: Tips for Effective Courtroom Testimony," <u>Forensic Focus □ The Journal of The West Virginia State Police Forensic Laboratory</u>, Vol. 1, No. 2, Jul.-Dec. 1995, pp. 1, 11-13.</p> <p>Saks, M.J., "Implications of the Daubert Test for Forensic Identification Science," <u>Shepard's Expert and Scientific Evidence</u>, Vol. 1, No. 3, Winter, 1994, pp. 427-434.</p> <p>Sibert, R.W., "Laboratory Examinations Conducted Within the Field of Firearms Identification: A Tracing of the Acceptance by the Courts of Their Use in Expert Testimony," paper submitted to the George Washington University Department of Forensic Sciences, 1973.</p> <p>Thornton, J.I., "Courts of Law v. Courts of Science: A Forensic Scientist's Reaction to Daubert," <u>Shepard's Expert and Scientific Evidence</u>, Vol. 1, No. 3, Winter, 1994, pp. 475-485.</p> <p>15.2.5 AFTE Journal</p> <p>Adler, M., "How to Refute the Experts Told Members at Lawyers' Club Meeting," 1972; 4(3):26.</p> <p>Bell, V.P., "Admissibility of Evidence of Experiments," 1980; 12(3):51.</p> <p>Bisbing, R.E., and Wilmer, J.H., "Admissibility of Fingernail Identification Undecided in Michigan," 1985; 17(2):96.</p> <p>Boyle, P.J., "Role of the Expert Witness," 1989; 21(4):639.</p> <p>"California Department of Justice Firearms Toolmark Identification Training Syllabus: Professionalism," 1991; 23(1):554-558 (court appearances).</p> <p>"California Department of Justice Firearms Toolmark Identification Training Syllabus: Professionalism," 1991; 23(2):727-738 (demonstrative evidence and expert testimony).</p> <p>Chicago Tribune, "False Testimony," 1980; 12(3):84.</p> <p>Crossman, E.B., "Qualifications of a Ballistics Expert," 1985; 17(3):119.</p> <p>District Court of Oklahoma, "Transcript of Bullet Examination Testimony," 1986; 18(1):71.</p> <p>"Effective Expert Testimony," 1972; 4(4):8.</p> <p>Garrison, D.H., "Intent Behind the Bullet," 1993; 25(4):294-296.</p>	

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<p>“Little Gunmen: Shooting Reconstruction Miniatures,” 1991; 23(3):836-848.</p> <p>Grzybowski, R.A., and Murdock, J.E., “Firearm and Toolmark Examiners □ Meeting the Daubert Challenge,” 1998; 30(1):3-14.</p> <p>Hathaway, R.A., “Inadmissibility of Photographs,” 1979; 11(2):52.</p> <p>Hodge, E.E., and Blackburn, B.D., “Courtroom Demeanor Information,” 1984; 16(4):35.</p> <p>“Firearms/Toolmark Examiner in Court,” 1979; 11(4):70.</p> <p>“Firearms/Toolmark Examiner in Court,” 1989; 21(2):232-242.</p> <p>Hodge, S.A. and Blackburn, S.A., “The Firearms-Toolmark Examiner in Court”, October 1979.</p> <p>Joling, R.J., and Stern, W.W., “An Overview of Firearms Identification Evidence for Attorneys, II: Applicable Law of Recent Origin,” 1981; 13(4):134-139.</p> <p>“An Overview of Firearms Identification Evidence for Attorneys, III: Qualifying and Using the Firearms Examiner as a Witness,” 1981; 13(4):140-144.</p> <p>“An Overview of Firearms Identification Evidence for Attorneys, IV: Practice and Procedures When Using the Firearms Examiner and Demonstrative Evidence,” 1981; 13(4):145-148.</p> <p>Keefe, J.F., “Forensic Sciences: Criminal Justice System Viewed by the Defense,” 1980; 12(2):59.</p> <p>Mann, M., Henson, G., Stone, R., and Guerra, S., “Visual Aides for Firearm Training and Courtroom Testimony,” 1994; 26(4):309-310.</p> <p>“Maryland State Court of Appeals. Appeals Case: (Olen J. Kelly et. al. vs. R.G. Industries, Inc., et. al.),” 1986; 18(2):77.</p> <p>Miller, K.E., “Proof of Opinion,” 1973; 5(2):8.</p> <p>Molnar, S., “Some Comments on Testifying in Court,” 1971; 3(3):46.</p> <p>Moses, R.E., “Scientific Proof in Criminal Cases: A Texas Lawyer’s Guide,” 1989; 21(2):123-128.</p> <p>Munhall, B.D., “Tools for the Firearm Examiner in Tort Matters,” 1972; 4(3):11.</p> <p>Murdock, J.E., “Some Suggested Court Questions to Test Criteria for Identification Qualifications,” 1992; 24(1):69-75.</p> <p>“Science in Criminal Law Newsletter,” 1980; 12(3):85.</p> <p>Tanton, R.L., “Jury Preconceptions and Their Effect on Expert Scientific Testimony,” 1980; 20(2):67.</p> <p>Townshend, D.G., “Observation of the Witness,” 1973; 5(4):26.</p> <p>White, R.H., “Idle Thoughts Concerning Admissibility,” 1976; 8(4):50.</p>	

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<p>Wilson, C.M., "Evidence in Firearms Cases," 1983; 15(2):83.</p> <p>15.2.6 Reference Materials External Laboratory Review and Tours</p> <p>The following reference materials serve several purposes:</p> <ul style="list-style-type: none"> • To provide a wider range of additional resources should you have a particular interest in a given topic. • To provide reference materials for your future professional use. • To allow you to gain additional depth in particular subject areas. <p>Should you encounter other references in this category, you are encouraged to make additional notes about them at the end of this listing.</p> <p>15.2.7 Books</p> <p>Kirk, P.L., and Bradford, L.W., <u>The Crime Laboratory: Organization and Operation</u>, Charles C. Thomas, Springfield, IL, 1965.</p> <p>Osterberg, J.W., <u>The Crime Laboratory</u>, Clark Boardman Company, Ltd., New York, NY, 1982.</p> <p>15.2.8 Periodicals</p> <p>Cadman, W.J., "How to Get the Best from Your Laboratory," <u>The Police Chief</u>, Feb. 1978, pp. 64-70.</p> <p>15.2.9 Professional Journals</p> <p>Fisher, A.J., "Developing a Forensic Science Laboratory," <u>Journal of Forensic Sciences</u>, 1986, pp. 1177-1184.</p> <p>15.2.10 AFTE Journal</p> <p>Bradford, L.W., "Barriers to Quality Achievement in Crime Laboratory Operations," 1983; 15(2):71.</p> <p>Fleming, P.J., and Purtell, D., "Scientists or Factory Workers?", " 1989; 21(2):119-120.</p> <p>Howe, W.J., "Crime Lab Study Funded By NIJ," 1980; 12(3):73.</p> <p>Lucas, D.M., "Laboratory Director's View of the Firearms Section," 1989; 21(2):188-190.</p> <p>Rabren, C.L., "Laboratory Accreditation, " 1982; 14(3):36.</p> <p>Serrill, M.S., "Forensic Sciences: Overburdened, Underutilized," 1980; 12(4):58.</p> <p>15.2.11 Research Reports</p> <p>Law Enforcement Assistance Administration, <u>Utilization of Criminalistics Services by the Police</u>, U.S. Government Printing Office, Washington, DC, 1974.</p> <p>National Institute of Justice, <u>Forensic Evidence and the Police: The Effects of Scientific Evidence on Criminal Investigations</u>, U.S. Government Printing Office, Washington, DC, 1984.</p>	

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<p>15.2.12 Manuals</p> <p>American Society of Crime Laboratory Directors, <u>Laboratory Accreditation Board Manual</u>, current edition.</p> <p>◆ End</p>	